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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,379	02/25/2004	Hyung-Joon Kim	YOU102	3388

7590 08/26/2008
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EXAMINER

CAMERON, ERMA C

ART UNIT	PAPER NUMBER
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1792

MAIL DATE	DELIVERY MODE
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08/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/786,379	Applicant(s) KIM ET AL.	
	Examiner /Erma Cameron/	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,7,8,10,11,13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7, 8, 10, 11, 13, 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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Claims 1 and 13: “a coating of 2 um to 3 um in thickness” is new matter. The only reference to thiol coating thickness in the specification is that (8:33-9:1) "for the case of using ODT as coating materials for CRS, the thickness of the coatings is typically in the range of 2 to 3 um".

Thus, the claim that thiol coatings in general on the substrates of claim 1 or claim 13 is 2 to 3 um thick is not supported by the specification as filed.

The applicant is requested to cancel new matter.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 7-8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reihls et al (6652669).

‘669 teaches treating aluminum or Al alloy by coating with n-decanethiol in ethanol at 1 g/l (~5 mM) (see Examples).

‘669 teaches n-decanethiol. This is a homolog of the octadecanethiol of claim 3.

'669 does not teach a conc. of 20-50 mM, an immersion time of 3 or 11 seconds, or a coating of 2-3 um in thickness, but it would have been obvious to one of ordinary skill in the art to have optimized these parameters thru no more than routine experimentation.

Response to Arguments

The applicant has argued that '669 does not teach the conc., time and thickness claimed in the independent claim.

However, it is the examiner's position that the conc., time of immersion and coating thickness as taught in the examples of '669 are merely exemplary, and do not constitute limitations on the process. Moreover, such differences do not support patentability of subject matter unless there is evidence indicating such parameters are critical. Applicant has not shown this. See MPEP 2144.05 II.

5. Claim 1-3, 5, 7-8, 10-11 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10 - 001784.

'784 teaches applying 1-octadecane thiol or other alkyl thiols to electro-galvanized steel, in a water-alcohol mixture at 5 millimoles (presumably in one liter), by dipping and drying (see Abstracts; [0007]-[0011] of translation).

'784 does not teach a conc. of 20-50 mM, but it would have been obvious to one of ordinary skill in the art to have optimized the conc. thru no more than routine experimentation.

‘784 fails to teach length of time for the dipping process, but it would have been obvious to optimize the length of time because the dipping time is known to be a parameter that is important to control in a coating step.

‘784 fails to teach the coating thickness, but it would have been obvious to one of ordinary skill in the art to have optimized the coating thickness thru no more than routine experimentation

Response to Arguments

The applicant has argued that ‘784 does not teach the conc., time and coating thickness claimed in the independent claims.

However, it is the examiner’s position that the conc., time and thickness as taught in the examples of ‘784 is merely exemplary, and does not constitute a limitation on the process. Moreover, such differences do not support patentability of subject matter unless there is evidence indicating such parameters are critical. Applicant has not shown this. See MPEP 2144.05 II.

Regarding the treatment time, ‘784 teaches “dipping” (see Examples), which is expected to be of short duration.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Erma Cameron/ whose telephone number is 571-272-1416. The examiner can normally be reached on 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Erma Cameron/

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Primary Examiner
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August 24, 2008